PRODUCT INFORMATION

FEREX® 4.034
MAGNETOMETER WITH 4-CHANNEL DATA LOGGER
Product description

The FEREX is a vertical gradient fluxgate magnetometer that measures the deformation of the earth magnetic field evoked by ferromagnetic objects and soil properties.

The FEREX 4.034 can be used either in the direct meter or data recording mode. Four channels allow the expansion of the FEREX 4.034 to a multi probe system for large area detection. A serial interface provides the option to link alternative sensors and a GPS for precise navigation during the field survey and geo-referenced positioning of the recorded data.

Characteristics

- Magnetometer with tension band technology - provides sensor alignment for lifetime
- In-built filters for detection in close vicinity to power lines
- Precise handling, light weight, compact design
- High detection sensitivity, improved signal to noise ratio
- 3.5” color sunlight readable display
- Data logging of up to 4 FOERSTER fluxgate sensor channels (differential and absolute values)
- Option to link alternative sensors (e.g. GEOMETRICS® 824A) via serial interface
- Serial interface to link various DGPS systems or odometer
- Implemented tool to edit customized GPS-drivers
- Comfortable navigation screen and various navigation modes
- Managing large survey areas consisting of multiple survey grids
- Definition of various survey grid layouts by defining or importing polygon positioning data
- Software DATA2LINE for project definition, post processing and evaluation of recorded data
- Integrated stake-out function using imported DATA2LINE object and position lists
Product Packages

FEREX 4.034

- Control unit
- FEREX probe MG-10-550
- Probe cable
- Carrying rod with battery pack
- Probe mount
- Carrying belt
- Rugged case
- Batteries
- Start/Stop-Handgrip
- Data transfer cable
- SD-Card
- DATALOAD 2 software
- User manual

Options

- Multi probe holder up to 8 fluxgate probes
- Wheel set
- GEOMETRICS® 824 A sensor
- Probe holder for GEOMETRICS® 824A sensor
- GPS antenna mount
- Borehole detection kit
- Waterproof probe cables up to 100 m
- Headphone
## Technical Specification

### Control Unit

| Weight                        | 4.1 kg complete detector incl. batteries  
|                              | 12.6 kg complete detector set in case |
| Dimensions                   | FEREX®  
|                              | Case L 1250 mm  
|                              | L x W x H 1000 x 415 x 170 mm  
| Display                      | 3.5" LCD with adjustable backlight, sunlight readable |
| Memory                       | 32 GB SD-Card |
| Interfaces                   | 4x analogue fluxgate gradiometer, 1x serial |
| Temperature ranges           | Operation -37°C to +71°C  
|                              | Stock -57°C to +71°C |
| Power supply                 | 4 x 1.5 V batteries or  
|                              | 4 x 1.2 V NiMH |
| Battery size                 | IEC LR20 - ANSI «D» |
| Battery lifetime             | 1 probe, continuous > 8 hrs |
| Measuring ranges in FEREX mode | 8 linear ranges: ± 3 nT up to ± 10,000 nT  
|                              | and 1 logarithmic range |
| Sampling rate                | 900 Hz (each channel) |
| Resolution                   | 24 bit ADC |
| Protection grade             | IP 65 |

### Probe

| Design                        | Fluxgate gradiometer with 550 mm sensor spacing, tension band technology |
| Temperature drift             | <1 nT/K |
| Bandwidth                     | 230 Hz |
| Measuring range               | ±10,000 nT gradient, ±62,000 nT absolute |
| Noise                         | < 1 nT p-p |
| Protection grade              | IP 68, 100m with optional sealing plug |

### Qualifications

- MIL-STD 810G 514. Random Vibration  
- MIL-STD 810G 516. Mechanical Shock  
- MIL-STD 810G 516. Transit Drop Test  
- MIL-STD 810G 501. High Temperature  
- MIL-STD 810G 502. Low Temperature  
- MIL-STD 810G 503. Temperature Shock  
- MIL-STD 810G 506. Blowing Rain  
- AEODP-7 Edition B, Annex A-1  

Brand name:  
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